

Form PTO-1449
(REV. 7-92)

U.S. DEPARTMENT OF COMMERCE
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VNI 169 RI

09/173,582

Applicant(s): Rangan et al.

Filing Date: 10/15/98

Group Art Unit: 2732

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER							DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
T-D	3	6	1	9	5	0	5	11/1971	Melle	375	110	
	3	8	3	5	2	6	0	09/1974	Prescher et al.	379	237	
	3	9	8	8	7	1	6	10/1976	Fletcher et al.	370	100.1	
	4	1	5	0	4	0	4	04/1979	Tercic et al.	380	22	
	4	2	2	0	8	1	6	09/1980	Howells et al.	370	24	
	4	2	5	8	4	3	4	03/1981	Glowinski et al.	370	60	
	4	3	4	7	5	2	7	08/1982	Lainez	358	105.3	
	4	3	5	9	7	7	0	11/1982	Suzuka	370	105.3	
	4	4	1	2	3	2	4	10/1983	Glowinsky et al.	370	58.1	
	4	4	1	9	7	6	5	12/1983	Wycoff et al.	455	38.3	
	4	4	2	9	4	0	5	01/1984	Bux et al.	375	89	
	4	4	4	5	2	1	3	04/1984	Baugh et al.	370	94.1	
	4	4	4	9	2	4	8	05/1984	Leslie et al.	455	38.3	
	4	4	7	2	8	0	2	09/1984	Pin et al.	370	108	
	4	4	8	4	2	1	8	11/1984	Boland et al.	358	86	
	4	5	3	0	0	8	8	07/1985	Hamstra et al.	370	110.1	
	4	5	4	3	6	5	2	09/1985	Amada et al.	370	66	
	4	5	4	7	8	8	0	10/1985	De Vita et al.	370	67	
	4	5	4	9	2	9	2	10/1985	Isaman et al.	370	85.15	
	4	5	5	6	9	7	0	12/1985	Flanagin et al.	370	60	
	4	5	7	7	3	1	2	03/1986	Nash	370	84	
	4	5	7	7	3	1	5	03/1986	Otsuka	455	38.3	
	4	5	8	0	7	7	6	04/1986	Andruzzi, Jr. et al.	375	269	
	4	5	8	7	6	5	0	05/1986	Bell	340	825.05	
	4	6	3	7	0	1	4	01/1987	Bell et al.	340	825.05	
	4	6	5	6	5	9	2	04/1987	Spaenenburg et al.	364	490	
	4	6	7	4	0	8	2	06/1987	Flanagin et al.	370	60	
	4	6	7	7	6	1	1	06/1987	Yanosy, Jr. et al.	370	85	
	4	7	1	5	0	0	2	12/1987	Vernon et al.	364	422	
T-D	4	7	2	6	0	1	8	02/1988	Bux et al.	370	85.5	

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F-1)	4	7	5	9	0	1	0	07/1988	Murata et al.	370	66	
↑	4	7	6	6	5	9	0	08/1988	Hamada et al.	370	56	
	4	7	6	6	5	9	1	08/1988	Huang	370	60	
	4	7	6	9	8	1	3	09/1988	Lenart	370	60	
	4	7	7	1	4	1	7	09/1988	Maxwell et al.	370	296	
	4	7	7	1	4	2	6	09/1988	Rattlingourd et al.	375	120	
	4	7	8	2	4	8	5	11/1988	Gollub	370	118	
	4	8	0	0	5	6	0	01/1989	Aoki et al.	370	108	
	4	8	0	7	2	2	4	02/1989	Naron et al.	370	94.1	
	4	8	1	1	3	6	7	03/1989	Tajika	370	108	
	4	8	2	5	4	3	5	04/1989	Admundsen et al.	370	85.1	
	4	8	3	7	7	9	9	06/1989	Prohs et al.	379	224	
	4	8	4	5	6	0	9	07/1989	Lighthart et al.	395	275	
	4	8	4	7	6	1	3	07/1989	Sakurai et al.	340	825.21	
	4	8	5	8	2	3	2	08/1989	Diaz et al.	370	85.7	
	4	8	6	6	7	0	4	09/1989	Bergman	370	85.4	
	4	8	7	2	1	5	7	10/1989	Hemmady et al.	370	60	
	4	8	7	6	6	8	3	10/1989	Suzuki	370	97	
	4	8	9	7	8	3	1	01/1990	Negi et al.	370	296	
	4	9	0	7	2	6	0	03/1990	Prohs et al.	379	224	
	4	9	2	0	4	8	3	04/1990	Pogue et al.	395	425	
	4	9	3	0	1	2	7	05/1990	Abaziou et al.	370	110.4	
	4	9	3	1	2	5	0	6/1990	Greszczuk	375	8	
	4	9	5	4	9	8	8	09/1990	Robb	365	189.02	
	4	9	5	9	7	7	4	09/1990	Davis	364	200	
	4	9	6	1	1	8	8	10/1990	Lau	370	94.2	
	4	9	6	4	1	2	1	10/1990	Moore	370	100.1	
	4	9	7	7	5	8	2	12/1990	Nichols et al.	375	118	
	4	9	8	5	8	9	1	01/1991	Fujiwara et al.	370	110.1	
	4	9	9	3	0	2	6	02/1991	Yamashita	370	100.1	
	5	0	0	1	7	0	7	03/1991	Kositpaiboon et al.	370	94.1	
	5	0	0	7	0	4	5	04/1991	Tsuzuki	370	94.1	
	5	0	1	4	2	4	7	05/1991	Albachten, III et al.	365	230.05	
	5	0	1	8	1	3	6	05/1991	Gollub	370	60.1	
	5	0	2	0	0	5	8	05/1991	Holden et al.	370	109	
	5	0	2	0	1	3	2	05/1991	Nazarenko et al.	455	17	
	5	0	4	1	9	2	4	08/1991	Blackborow et al.	360	69	
	5	0	5	8	1	1	0	10/1991	Beach et al.	370	85.6	
✓	5	0	6	5	3	9	8	11/1991	Takashima	370	94.1	
F-1)	5	0	6	7	1	4	9	11/1991	Schneid et al.	379	224	

T.D	5	0	8	4	8	7	2	01/1992	Le Cucq et al.	370	85.1	
↑	5	0	9	5	4	9	4	03/1992	Takahashi et al.	375	10	
	5	1	0	3	4	4	6	04/1992	Fischer	370	85.1	
	5	1	1	9	3	7	3	06/1992	Erdriesson et al.	370	85.15	
	5	1	2	1	3	8	2	06/1992	Yang et al.	370	296	
	5	1	2	8	9	3	0	07/1992	Nazarenko et al.	370	60	
	5	1	3	4	6	1	1	07/1992	Steinka et al.	370	79	
	5	1	3	8	4	4	0	08/1992	Radice	370	110.1	
	5	1	4	0	5	8	7	08/1992	Mueller et al.	370	85.15	
	5	1	4	6	4	5	5	09/1992	Goke et al.	370	66	
	5	1	6	3	1	4	8	11/1992	Walls	395	600	
	5	1	6	4	9	3	8	11/1992	Jurkevich et al.	370	60	
	5	1	7	9	5	5	4	01/1993	Lomicka et al.	370	85.13	
	5	1	8	9	4	1	4	02/1993	Tawara	340	825.5	
	5	2	0	0	9	5	2	04/1993	Bernstein et al.	370	79	
	5	2	0	2	8	9	9	04/1993	Walsh	375	8	
	5	2	0	6	8	6	3	04/1993	Nazarenko et al.	371	37.1	
	5	2	0	8	8	0	7	5/1993	Gass et al.	370	60.1	
	5	2	1	2	7	2	4	05/1993	Nazarenko et al.	371	37.1	
	5	2	1	4	6	4	8	05/1993	Leopagnol et al.	370	85.15	
	5	2	2	9	9	9	8	07/1993	Weisser	370	108	
	5	2	5	1	2	0	7	10/1993	Abensour et al.	370	60.1	
	5	2	8	3	7	8	6	02/1994	Hoff et al.	379	85.13	
	5	3	0	5	3	0	6	04/1994	Spinney et al.	370	296	
	5	3	0	5	3	1	7	04/1994	Szczepanek	370	85.5	
	5	3	1	1	1	1	4	05/1994	Sambamurthy et al.	370	296	
	5	3	1	5	5	8	8	5/1994	Kajiwara et al.	370	60.1	
	5	3	6	1	2	6	1	11/1994	Edem et al.	370	85.3	
	5	3	7	5	1	2	1	12/1994	Nishino et al.	370	94.2	
	5	4	1	0	5	3	5	04/1995	Yang et al.	370	13	
	5	4	5	3	9	8	4	09/1995	Mueller	370	85.13	
	5	5	0	4	7	3	8	04/1996	Sambamurthy et al.	370	296	
	5	5	3	3	0	1	8	07/02/96	DeJager et al.	370	60.1	
✓1	5	5	9	4	7	3	4	01/14/1997	Worsley et al.	370	395	
T.D	5	6	4	8	9	5	6	07/1997	Sambamurthy et al.	370	296	
	5	7	5	1	7	2	4	05/1998	Elliott	370	336	
T.D	5	7	6	1	2	9	2	06/1998	Wagner et al.	379	93.09	
	5	7	9	0	7	8	6	08/1998	Wakeman et al.	379	249	
	5	9	4	6	3	0	7	08/1999	Onikuwa	370	389	
T.D	6	1	0	8	4	0	5	08/2000	Luong	379	93.09	

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FOREIGN PATENT DOCUMENTS													
	DOCUMENT NUMBER							DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
T ₂	0	1	3	1	6	6	2	✓ 01/85	EPO	—	—	YES	NO
↑	0	3	1	8	3	3	2	✓ 05/89	EPO	—	—		
	WO	A	88	0	5	2	33	✓ 07/88	WIPO	—	—		
	A1	2	5	4	0	3	5	✓ 10/89	Japan	—	—		
	WO	A	89	1	1	1	83	✓ 11/89	WIPO	H04B1	38		
↓	A1	2	9	7	9	2	6	✓ 12/89	Japan	—	—		
T ₂	A5	1	7	5	9	7	7	✓ 07/93	Japan	—	—		
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)													
T ₂		A Communication System Proposal Presented to Representatives of Apple Computer on March 5, 1990.											
↑		A disclosure of a communication system was presented at the IEEE 802.9, Standards Meeting on Nov. 8-12, 1992. The pages entitled: "Multi-Media Applications are Ready".											
		✓ "ATM Overview," National Semiconductor Corp., ATM Overview F-Fred Device, Aug. 1993, entire booklet.											
		✓ "ATM User-Network Interface Specification: Version 3.0," Technical Committee of the ATM Forum, pp. iii-103.											
		"DP839XX Isochronous Time Slot Exchanger (IsoTSX™)," Revision 0.8, bearing the date Oct. 29, 1992 and DP839XX Isochronous Ethernet Physical Layer isoPHY™ Revision 1.1, bearing the date Oct. 1992, were disclosed to IBM.											
		"DP839XX Isochronous Ethernet Physical Layer Iso-PHY™, Revision 2.1, bearing the date Dec. 1992 and DP839XX Isochronous Time Slot Exchanger, Revision 1.0, bearing the date Dec. 13, 1992, were disclosed to IBM and Ericsson.											
		"DP839XX Isochronous Ethernet Physical Layer Iso-PHY™, Revision 3.0, bearing the date Dec. 1992 and Isochronous Time Slot Exchanger (IsoTSX™ Workbook, Revision 1.2, bearing the date Feb. 16, 1993, was disclosed to Luxcom, Inc. of Fremont, California.											
		"DP8390 Network Interface Controller: An Introductory Guide", Local Area Network Databook, National Semiconductor Corp., pp. 1-206 to 1-213, 1992 Edition.											
		"DP83950A Repeater Interface Controller," Local Area Network Databook, National Semiconductor Corp., pp. 3-3 to 3-73, 1992 Edition.											
		"DP83950EB at IEEE 802.3, Multi-Port Repeater Evaluation Kit, Local Area Network Databook, National Semiconductor Corp., pp. 75-87, 1992 Edition.											
		"DP83932B "Systems-Oriented Network Interface Controller", Local Area Network Databook, National Semiconductor Corp., pp. 1-288 to 1-383, 1992 Edition.											
		"Exchangeable Card Architecture Specification," Release 1.00, bearing the date Dec. 20, 1991, pp. 7, 20 and 22.											
		"Fiber Distributed Data Interface (FDDI) - Token Ring Media Access Control (MAC)," American National Standard for Information System - Document ANSI X3.139, 1987.											
		✓ Gallagher, C.A., "IEEE 802.9: A Multi-Service Lan Interface," Second IEEE National Conference on Telecommunications, Apr. 1989, York GB, pp. 173-178.											
		HMUX ERS "FDDI-II Hybrid Multiplexor (HMUX)," Rev. 2.4, Mar. 25, 1991.											
		IBM - On or about Nov. 1, 1991, IBM Corporation provided a "Task Order and appendix". A copy of pp. 6 and 7 of the Task Order and appendix titled, Isoethernet Project Local Cluster Controller Version 1.2.											
		"IBM's Multimedia Venture: Opportunity for its Hardware?," vol. 38, No. 1930, p. 1, Sept. 21, 1992.											
		"IEEE 802.3, Draft Supplement to IEEE Std 802.3 DSMA/CD Access Method and Physical Layer Specifications," Institute of Electrical and Electronics, November 15, 1989.											
		"IEEE 802.9, Draft Standard Integrated Services (IS) LAN Interface at the MAC and PHY Layers," Institute of Electrical and Electronics, Nov. 1992.											
		"Integrated PBX Systems, An NCC State of the Art Report," The National Computer Centre Limited, 1987.											
↓		Irupe et al., "Integrated Information and Communication System for Business Networks," Hitachi Review 40(3):241-247, 1991.											
T ₂		"ISDN Basic Rate Interface System Design Guide," Telenetworks document, Aug. 1989.											

7.0	"ISDN Primary Rate Interface System Design Guide," Telenetworks document, Jul. 1989.	P
↑	✓ "IsoNet Transforms LANs and WANs Into Interactive Multimedia Tools," Brian Edem et al., Computer Technology Review, Winter 1992, 3 pgs. "ISO/IEC 3309" International Standard, ref. number ISO/IEC 3309; 1991 (E), 1991, 7 pgs.	
	"Local Area Network Databook" published by National Semiconductor, pp. 1-3 to 1-9, 1-242 to 1-248, 5-3 to 5-7.	P
	✓ Martini et al., "Real-Time Traffic in FDDI-II, Packet Switching vs. Circuit Switching," IEEE Infocom 1991, vol. 3, Apr. 1991, Bal Harbour, U.S., pp. 1413-1420.	
	"National Proposes Isochronous Ethernet," <i>Electronic News</i> , vol. 38, No. 1940, p. 19, Nov. 30, 1992.	P
	"PCMCIA Socket Services Interface Specification," Draft 2.00b, bearing the date Jul 17, 1992.	P
	✓ Ross, F.E. et al., "FDDI- A Lan Among Mans", Computer Communications Review, vol. 20, No. 3, Jul. 1990, New York, U.S., pp. 16-31.	
	✓ Shimizu, H. et al., "IVDLAN Standardization and Development," IEICE Transactions, vol. E74, No. 9, Sep. 1991, Tokyo, JP, pp. 2696-2702.	
	"Token-Ring Network Architecture Reference," pp. 5-1 through 5-28 and pp. 5-10 and 5-17.	P
	"VersaNet™ An Ethernet Extension for Isochronous Communications," bearing the date Aug. 14, 1992 is a paper sent to National Semiconductor Corp. from Condor Systems, Inc. of San Jose, CA on Aug. 18, 1992.	P
↓	Wirbel, Loring, "Scheme for Fast Ethernet Proposed," appears to be a newspaper article; date of article is uncertain, but is believed to be prior to March 1993.	P
T.0	Wong, David., "Second Generation 10Base T Silicon Solutions," IRE Wescon Convention Record, Vol. 35, Nov. 1991, No. Hollywood, Ca. pp. 238-242.	
EXAMINER <u>DANLZ PDN</u>		DATE CONSIDERED <u>6/8/05</u>
<p>*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</p>		